A Division of Systems, Inc.

HED SERIES

Hydraulic EOD Dock Leveler

Owner's/User's Manual

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Manual No. 4111-0020
Nov. 2009

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Recognize Safety Information

Safety-Alert Symbol

The Safety-Alert Symbol identifies important safety messages on equipment, safety signs, in manuals, or elsewhere. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

DANGER

The use of the word DANGER signifies the presence of an extreme hazard or unsafe practice which will most likely result in severe injury or death.

WARNING

The use of the word WARNING signifies the presence of a serious hazard or unsafe practice which may result in serious injury or death.

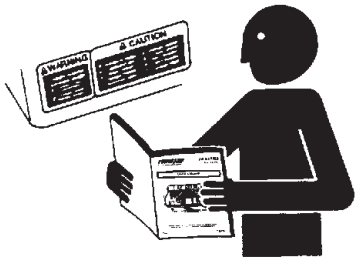
CAUTION

The use of the word CAUTION signifies possible hazard or unsafe practice which could result in personal injury.

IMPORTANT

The use of the word IMPORTANT is to draw attention to a procedure that needs to be followed to prevent machine damage.

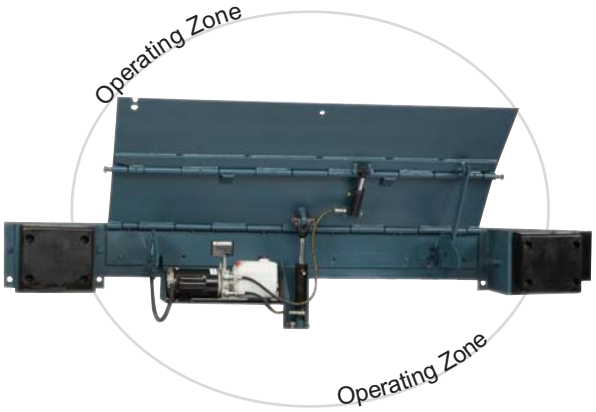
General Operational Safety Precautions



Read and understand the operating instructions and become thoroughly familiar with the equipment and its controls before operating the dock leveler.

Never operate a dock leveler while a safety device or guard is removed or disconnected.

Never remove DANGER, WARNING, or CAUTION signs or decals on the equipment unless replacing them.



Do not start the equipment until all unauthorized personnel in the area have been warned and have moved outside the operating zone.

Remove any tools or foreign objects from the operating zone before starting.

Keep the operating zone free of obstacles that could cause a person to trip or fall.

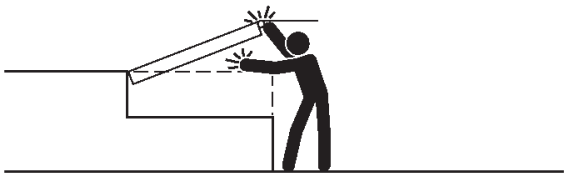
Operational Safety Precautions

Learn the safe way to operate this equipment. Read and understand the manufacturer's instructions. If you have any questions, ask your supervisor.

DANGER

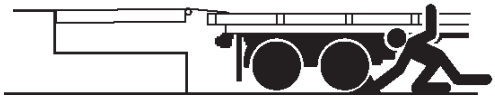
Stay clear of dock leveling device when freight carrier is entering or leaving area.

Do not move or use the dock leveling device if anyone is under or in front of it.

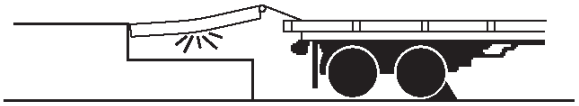


Keep hands and feet clear of pinch points. Avoid putting any part of your body near moving parts.

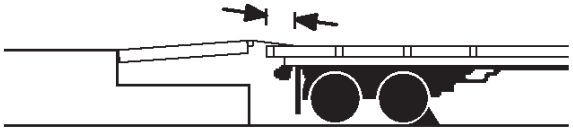
WARNING



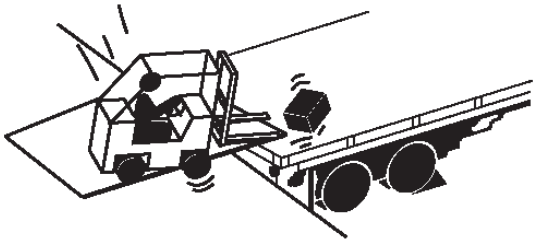
Chock/restrain all freight carriers. Never remove the wheel chocks until loading or unloading is finished and truck driver has been given permission to drive away.



Do not use a broken or damage dock leveling device. Make sure proper service and maintenance procedures have been performed before using.

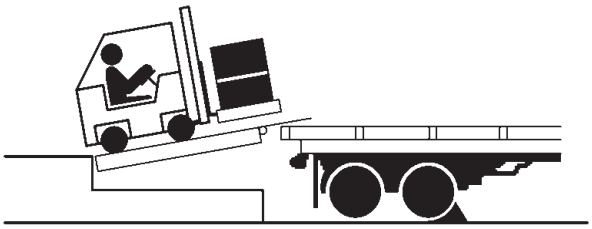


Make sure lip overlaps onto trailer at least 4 in. (102 mm).

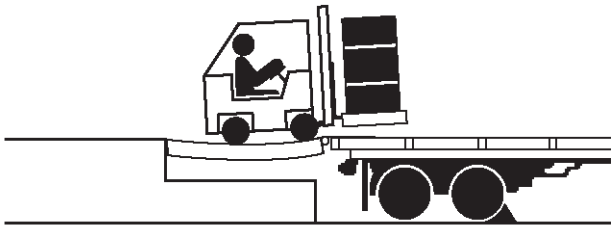


Keep a safe distance from both side edges.

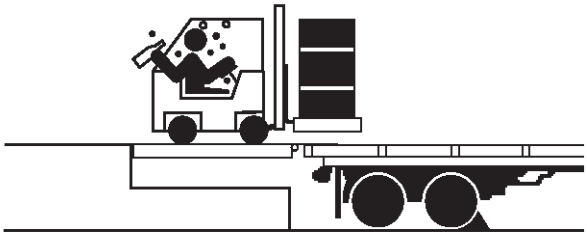
⚠ WARNING



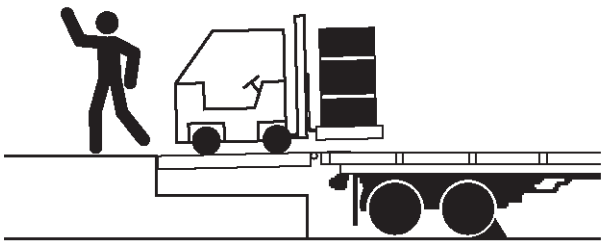
Do not use dock leveling device if freight carrier is too high or too low.



Do not overload the dock leveling device.



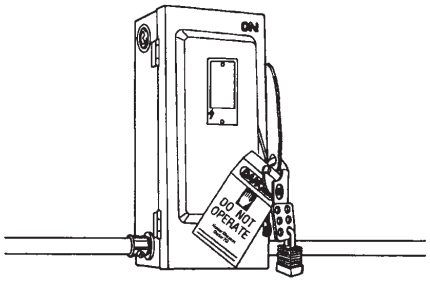
Do not operate any equipment while under the influence of alcohol or drugs.



Do not leave equipment or material unattended on dock leveling device.

Maintenance Safety Precautions

DANGER



Hydraulic and electrical power must be OFF when servicing the equipment. For maximum protection, use an OSHA approved locking device to lock out all power sources. Only the person servicing the equipment should have the key to unlock the device.

CAUTION

Always post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the unit before maintenance is complete.

WARNING

ALWAYS disconnect electrical power source and ground wire before welding on dock leveler.

DO NOT ground welding equipment to any hydraulic or electrical components of the dock leveler. Always ground to the dock leveler frame.

Failure to follow these instructions may result in damage to dock leveler and/or serious personal injury or death.

WARNING

DO NOT grind or weld if hydraulic fluid or other flammable liquid is present on the surface to be ground or welded

DO NOT grind or weld if uncontained hydraulic fluid or other flammable liquid is present. Stray sparks can ignite spills or leaks near the work area. Always clean up the oil leaks and spills before proceeding with grinding or welding.

Always keep a fire extinguisher of the proper type nearby when grinding or welding.

Failure to follow these instructions may result in serious personal injury or death.

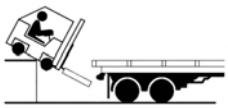
WARNING

ALWAYS stand clear of dock leveler lip when working in front of the dock leveler. Failure to do this may result in serious personal injury or death.

Safety Decals

2

DANGER



Unsupported dock leveler ramps can lower unexpectedly.

Before allowing vehicle to leave the dock always:

- Ensure that no equipment, material or people are on the dock leveler.
- Return the dock leveler to its stored position at dock level.

Failure to follow posted instructions will result in death or serious injury.

SAFETY INFORMATION

Operation

1. Read and follow all instructions and warnings in the owner's/user's manual.
2. Use of dock leveler restricted to trained operators
3. Always chock trailer wheels or engage truck restraint before operating dock leveler or beginning to load or unload.
4. Never use hands or equipment to move the ramp or lip
5. Before activating dock leveler:
   - Ensure trailer is backed in against bumpers.
   - Remove any end loads if required.
   - Check trailer alignment to avoid lip interference. If lip does not lower to trailer bed, reposition vehicle.
6. Ensure that truck bed supports extended lip or the leveler frame
7. Supports the ramp before driving on ramp.
7. Stay clear of hinges and front and sides of moving dock leveler.
8. Never use damaged or malfunctioning dock leveler. Report problems immediately to supervisor.

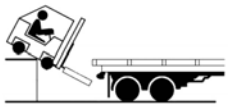
Maintenance/Service

1. Read and follow all instructions, warnings and maintenance schedules in the owner's/user's manual.
2. Maintenance/Service of dock leveler restricted to trained personnel.
3. Place barriers on the driveway and on dock floor to indicate service work is being performed.
4. DO NOT ENTER PIT unless dock leveler is securely supported by maintenance prop.
5. If electrically powered turn off and use OSHA lockout/tagout procedures.

Call 262.255.1510 for replacement placards, warning labels, or owner's/user's manuals.

2

DANGER



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Before allowing vehicle to leave the dock always:

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3. Place barriers on the driveway and on dock floor to indicate service work is being performed.
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5. If electrically powered turn off and use OSHA lockout/tagout procedures.

Call 262.255.1510 for replacement placards, warning labels, or owner's/user's manuals.

3

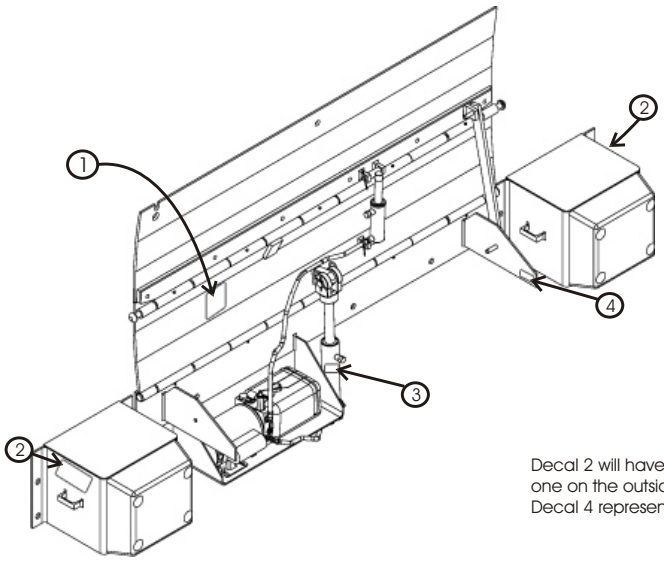
DANGER

CRUSH HAZARD
DO NOT REMOVE hydraulic cylinder until leveler is safely supported by maintenance prop. Refer to owner's/user's manual for proper maintenance procedure. Failure to comply will result in death or serious injury.

1

DANGER

Ramp swings toward you.
Stand Clear.
Use maintenance strut while servicing.
Failure to do so will result in death or serious injury.



Decal 2 will have two positions, one on the outside of the left bumper and one on the outside of the right bumper.
Decal 4 represents the placement of the serial tag.

INTRODUCTION

General Information

HED Series Edge-of-Dock levelers are available in the following sizes, weight capacities, and options:

Dimensions and Capacities			
Model # -	Deck - Width	Total Unit Width	Comparative Industry Rating
HED-66	66”	104”	20,000
HED-72	72”	110”	25,000
HED-78	78”	116”	30,000
HED-84	84”	122”	35,000

Call McGuire to discuss available voltages, phases and options to meet your specific needs.

Congratulations on your choice of a McGuire Edge-of-Dock leveler. This manual covers the HED series mechanical Edge-of-Dock levelers.

Designed by McGuire to be a marvel of simplicity and efficiency, your dock leveler, when properly installed, will provide many years of trouble-free performance with an absolute minimum of maintenance. To obtain maximum performance and longest possible use, a simple program of preventive maintenance is recommended.

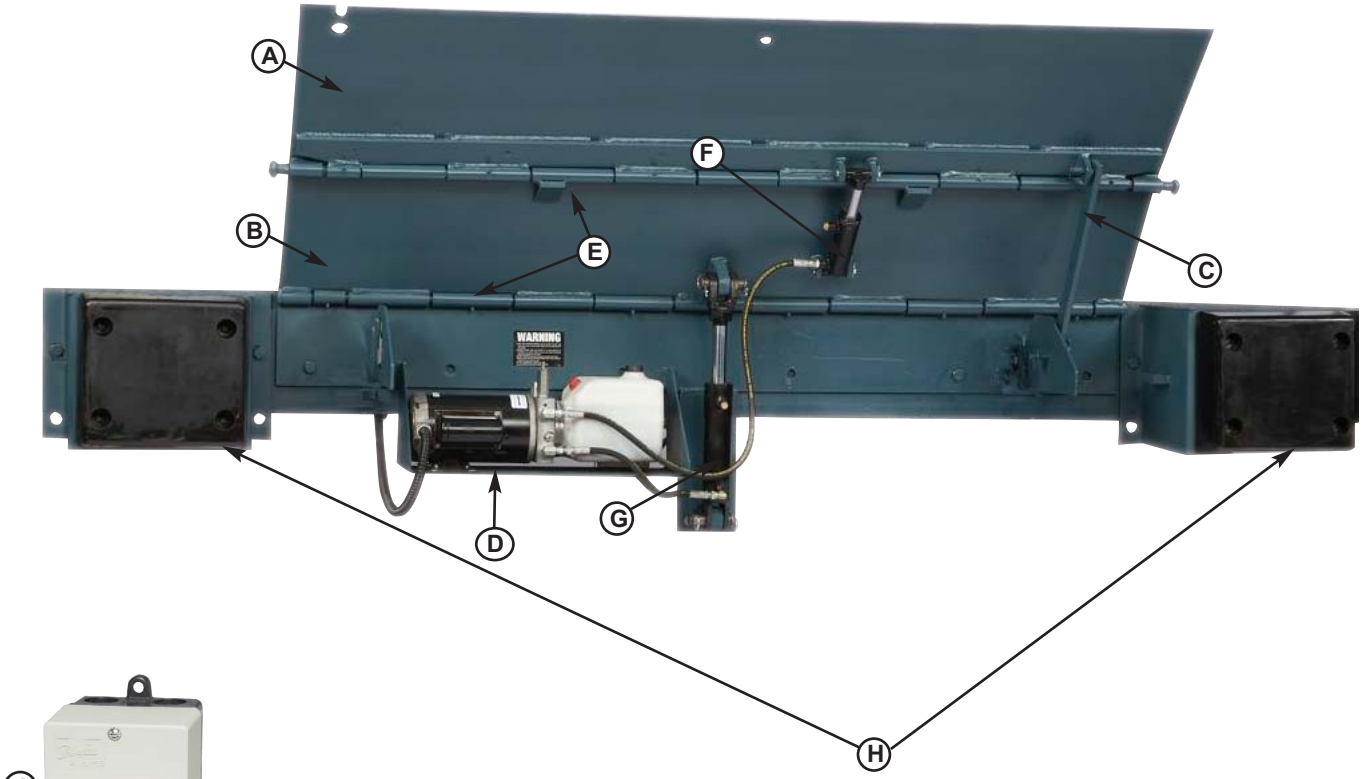
Once again, thank you and congratulations on your purchase of a McGuire mechanical edge-of-dock leveler.

The HED series Edge-of-Dock leveler comes equipped with an electrical control panel, which allows pushbutton operation of the dock leveler functions. Each HED dock leveler unit and control panel has been factory prewired and tested to ensure satisfactory operation.

To illustrate which connections are to be made in the field at installation, electrical drawings are included with each order or by contacting Systems, Inc. Technical Services.

Once again, thank you and congratulations on your purchase of a McGuire. Hydraulic Edge-of-Dock leveler.

Component Identification



A—Lip Plate
B—Center Plate
C—Safety Prop
D—Powerpack (Motor/Pump/Reservoir)
E—Hinge Pin
F— Lip Cylinder
G—Main Hoist Cylinder
H—Bumper Blocks (2 used)
J—Raise Button

THEORY

The HED Edge-of-Dock leveler uses a pressure operated valve block and single push-button operation for ease of use.

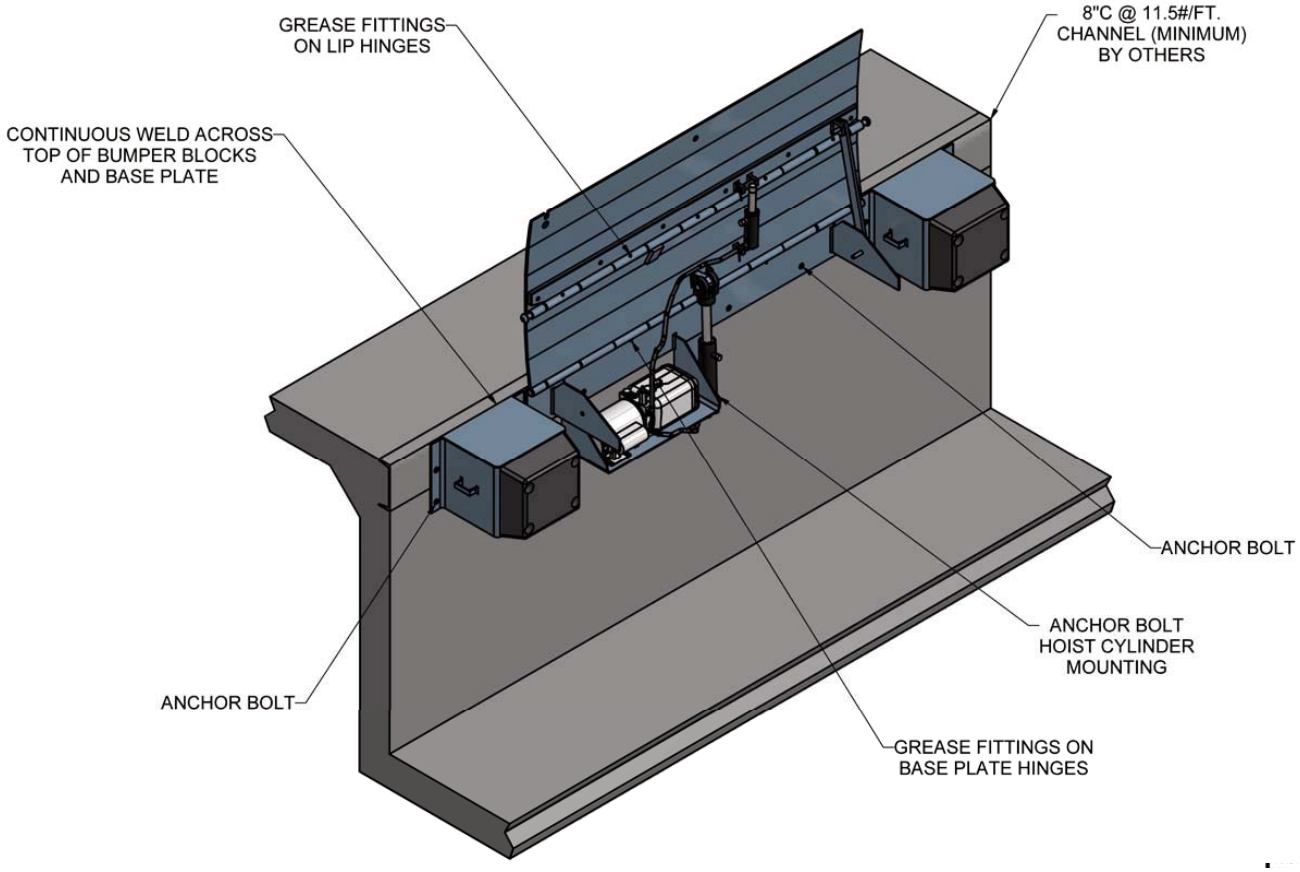
The dock leveler can be operated remotely using the RAISE button (J) on the control panel .

Platform (B) is raised by pushing and holding the RAISE button (J). This activates an electric motor (D) which, in turn, drives a hydraulic pump. The hydraulic pump forces oil into the platform cylinder (G), causing the platform to rise. Hold (J) until lip fully extends.

Releasing the raise button will allow the platform to float down to the below dock position. The lip will stay extended until the platform reaches the full below dock position.

Pressing the raise button will return the platform and lip to the stored position.

INSTALLATION DETAILS


GREASE FITTINGS ON LIP HINGES
8"C @ 11.5#/FT. CHANNEL (MINIMUM) BY OTHERS
CONTINUOUS WELD ACROSS TOP OF BUMPER BLOCKS AND BASE PLATE
ANCHOR BOLT
ANCHOR BOLT HOIST CYLINDER MOUNTING
ANCHOR BOLT
GREASE FITTINGS ON BASE PLATE HINGES

⚠ WARNING

Post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the dock leveler before installation has been completed.

Failure to follow the installation instructions can result in damage to dock leveler, the facilities, and/or serious personal injury or death.

⚠ CAUTION

Only trained installation professionals with the proper equipment should install this product.

IMPORTANT

DO NOT remove the shipping bands around the dock leveler lip until instructed to do so.

⚠ WARNING

DO NOT grind or weld if hydraulic fluid or other flammable liquid is present on the surface to be ground or welded.

DO NOT grind or weld if uncontained hydraulic fluid or other flammable liquid is present. Stray sparks can ignite spills or leaks near the work area. Always clean up the oil leaks and spills before proceeding with grinding or welding.

Always keep a fire extinguisher of the proper type nearby when grinding or welding.

Failure to follow these instructions may result in serious personal injury or death.

IMPORTANT

DO NOT connect the dock leveler electrical wiring and ground connections until all welding has been completed.

DO NOT ground welding equipment to any hydraulic or electrical components of the dock leveler. Always ground welding equipment to the dock leveler frame, NEVER to the platform.

Failure to follow these instructions may damage the motor, hoist cylinder, wiring, and/or control panel.

IMPORTANT

DO NOT weld continuously along the full length of the base plate. This can put unnecessary stress on the leveler components, causing the leveler to malfunction and shorten the lifespan of the affected components.

⚠ WARNING

If the platform is raised using an external lifting device or the hydraulic system is opened to atmosphere, air will enter into the hydraulic system.

Whenever this happens, always cycle the leveler at least 4 times using the leveler's own hydraulic power system before allowing the leveler to be put into service. This is to make sure all air is purged from the hydraulic cylinders. Failure to do this may result in serious personal injury or death.

⚠ CAUTION

Two people are required to engage the maintenance prop: one person to operate the lifting device, the other person to engage the maintenance prop.

H.E.D Installation Instructions
Flush Mount - Weld On

A flush mount weld on application is used when an 8” wide (minimum) embed channel is securely anchored into the concrete at the dock edge, and the dock height is adequate.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.

2. At chosen location for Edge-of-Dock leveler, locate the center of space and mark a point half of the base plate width to the left and right.

3. Using a proper lifting device, raise and position leveler on dock face with the top of the base plate being flush with the top of the embedded channel. Position ends of base plate to match up with marks made previously.

4. Tack weld base plate to dock steel on left hand end of the leveler. Check right hand end of base plate, ensure that end is against dock steel and that the top of the base plate is still flush with the top of the embedded channel. Tack right hand end to dock steel.

5. Position bump blocks out approximately 5/8” from the edge of the inside flange of the bump block to the end of the base plate. This will allow for vertical welding of both the base plate and the bump block flange back to the dock steel. Top of the bump block cover plate should be flush with the top of the embed channel. Tack weld bump blocks to dock steel.

6. Check the positioning of the base plate and the bump blocks.

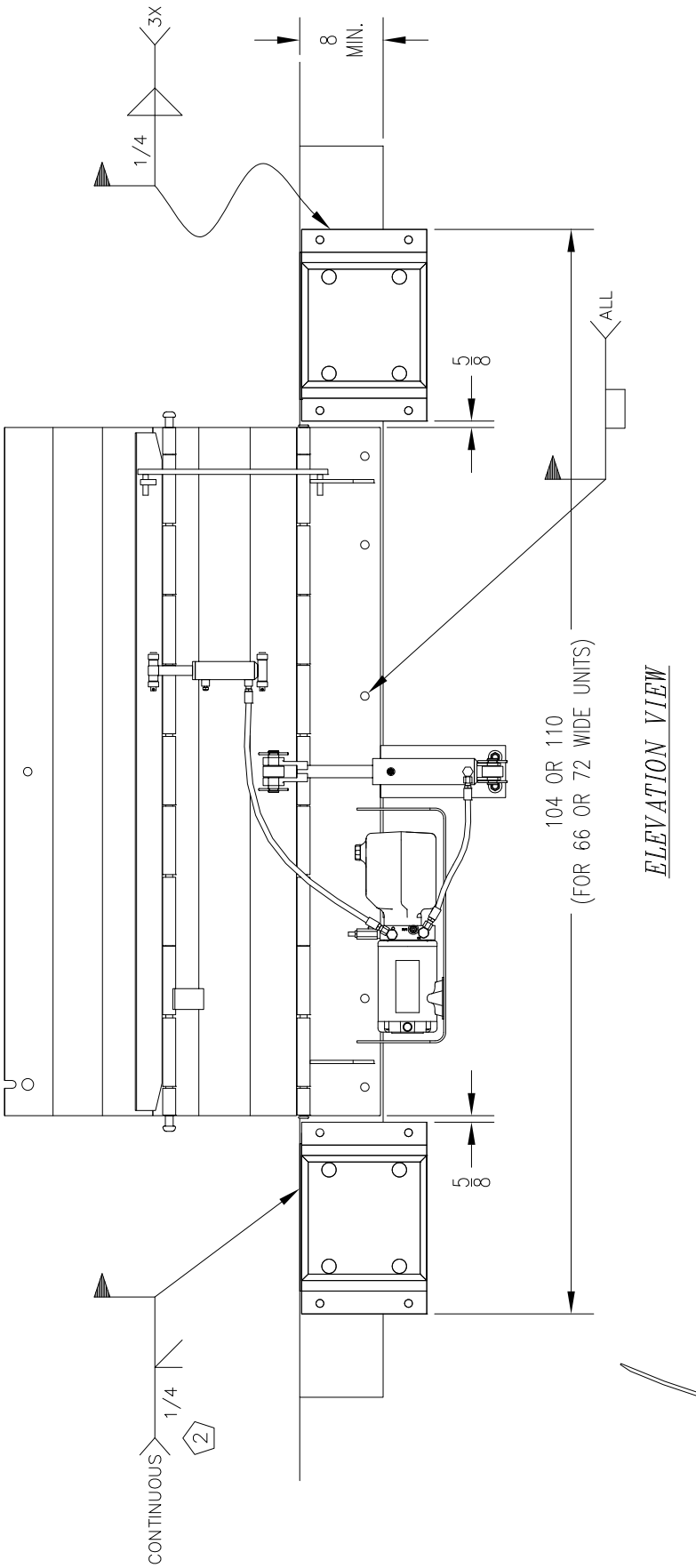
7. Complete welding of tacked parts as follows:
   A. Apply a continuous weld across top of each bumper and base plate to dock steel. Skip welding is acceptable to prevent warpage, but complete weld across the top must be completed.
   B. Weld vertically along each end of base plate and on both inboard and outboard flanges of bump blocks.
   C. Fully plug weld all holes in base plate.

8. Installer must remove all welding slag, and repaint welded areas.

9. Drill 5/8” dia. by 5” deep holes in concrete through holes in lower cylinder mount, and install anchor bolts with washers and tighten securely.

10. Field mount control box to inside wall. Field wire control box and hydraulic power unit per electrical schematic(s) provided. Read and comply with all local electrical codes.

11. Before install is complete, installer must make a final operational check of dock leveler to verify all phases of install are correct. Installer must complete, sign and return the Installation Check list upon completion.

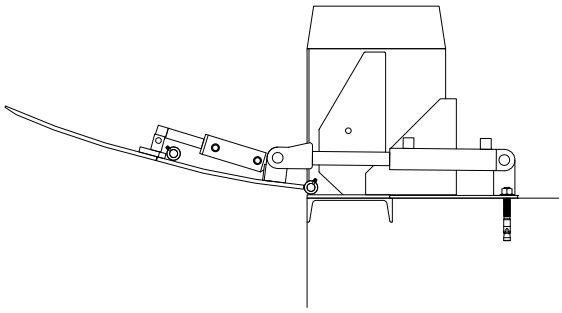


ELEVATION VIEW

⚠ WARNING

Securely block or support ramp and lip when in vertical positions. Lack of proper bracing can result in ramp dropping during adjustment or installation causing personal injury or damage to unit.

NOTE	DESCRIPTION
1	Top of base plate and bumper cover plate to be flush with top of dock floor and embedded channel
2	Apply continuous bevel weld across both bumpers and length of base plate.



H.E.D. Installation Instructions
Ramp Mount - Weld/Bolt On

A ramp mount-weld on application is used when adequate dock steel is securely anchored in the concrete at the dock edge, but the existing dock height is too low and the dock leveler must be installed above this height to correct this situation.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.

2. At chosen location for Edge of Dock leveler, locate the center of space and mark a point half of the base plate width to the left and right.

3. At the points marked to each side of center, measure and mark points 7-3/4" below dock level less height the unit is to be raised to locate bottom of base plate. This will locate the top of the base plate X" above dock level.

4. Using a proper lifting device, raise and position the leveler base plate to marked position. While holding base plate tight against dock face, tack weld securely to dock steel on left hand end of leveler. Check right hand end of base plate, ensure that end is against dock steel and that the bottom of the base plate is even with the marks made previously. Tack right hand end to dock steel. Support unit until final welding is ready to complete.

5. Position bump blocks out approximately 5/8" out from the edge of the inside flange of the bump block to the end of the base plate. Position the top of the tread cover plate on the bump blocks to be flush with the top of the base plate. Tack weld bump blocks to dock steel.

6. Place steel ramp plate in position, flush with top backside of base plate. Mark along full length of back edge of ramp plate. Slide ramp plate forward over dock leveler the width of bushing tool, approximately 2".

7. Place bushing tool on marked line at each end of ramp to ensure proper alignment at both ends, and tack weld ramp plate to dock leveler to hold ramp plate in place while bushing. A Skil Roto Hammer #736 or similar tool is recommended.

8. Using the back edge of the ramp plate as a guide, groove concrete approximately 3/4" deep by 2" wide, and should be the entire length of ramp plate.

9. Break tack welds holding ramp in place, slide ramp plate back into position with the top of the ramp plate flush with the top of the base plate. Tack weld each end and center of ramp plate to base plate.

10. Drill 5/8" dia. by 5" deep holes through ramp plate at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to ramp plate using a ¼" fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through the nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.

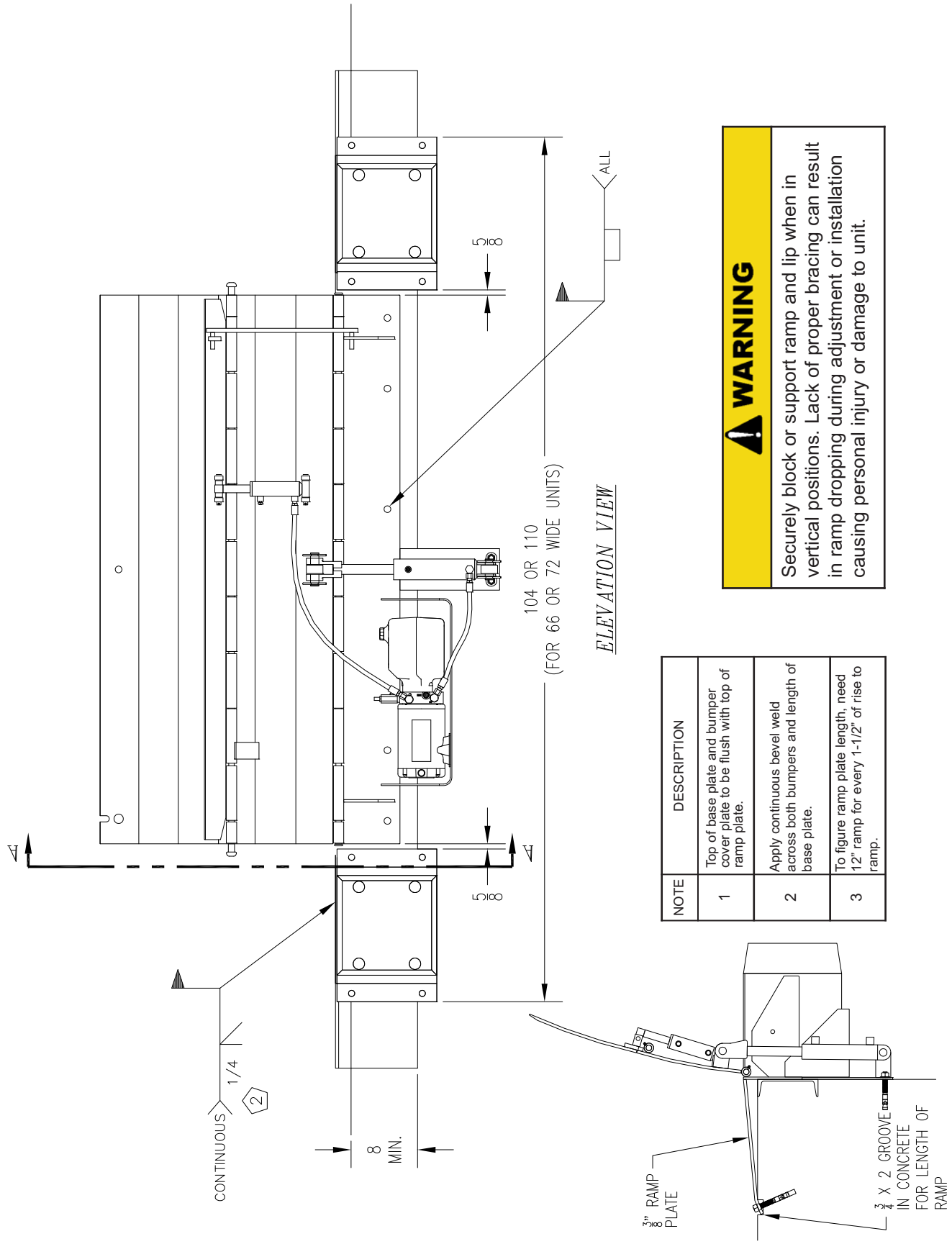
11. Complete welding of tacked parts as follows:
    A. Apply continuous weld across top of each bumper and base plate to ramp plate. Skip welding is acceptable to prevent warpage, but complete weld must be completed.
    B. Weld vertically along each end of base plate and on both inboard and outboard flanges of bump blocks.
    C. Fully plug weld all holes in base plate.

12. Installer must remove all welding slag, and repaint welded areas.

13. Drill 5/8" dia. by 5" deep holes in concrete through holes in lower cylinder mount, and install anchor bolts with washers and tighten securely.

14. Field mount control box to inside wall. Field wire control box and hydraulic power unit per electrical schematic(s) provided. Read and comply with all local electrical codes.

15. Before install is complete, installer must make a final operational check of dock leveler to verify all phases of install are correct. Installer must complete, sign, and return the Installation Check list upon completion.



NOTE	DESCRIPTION
1	Top of base plate and bumper cover plate to be flush with top of ramp plate.
2	Apply continuous bevel weld across both bumpers and length of base plate.
3	To figure ramp plate length, need 12" ramp for every 1-1/2" of rise to ramp.

⚠ WARNING

Securely block or support ramp and lip when in vertical positions. Lack of proper bracing can result in ramp dropping during adjustment or installation causing personal injury or damage to unit.

H.E.D. Installation Instructions
Flush Mount - Bolt On

A flush mount bolt on application is used when there is no steel on dock edge, and the dock height is adequate. Additional steel ramp plate and bolting is required with this type of installation.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.

2. At chosen location for Edge of Dock leveler, locate the center of space and mark a point half of the base plate width to the left and right.

3. At the points marked to each side of center, measure and mark points 7-1/2" below dock level (for ¼" ramp plate) to locate position for bottom of base plate. This position will place the top of the base plate ¼" above the dock floor. This position will vary with ramp plate thickness.

4. Mark line connecting these points and position support angles. Position angles as shown in installation drawing provided. Mark center of holes in each of the support angles.

5. At center marks, drill holes 5/8" dia. by 5" deep in concrete. Install anchor bolts with washers through support angles into holes in concrete. Tighten bolts until support angles are secure. Follow anchor manufacturers installation instructions for proper installation.

6. Using a proper lifting device, raise and position the leveler base plate to marked position, while resting on the support angles. While holding base plate tight against dock face, tack weld securely to support angles.

7. Drill 5/8" dia. by 5" deep holes in concrete through holes in base plate, and install anchor bolts with washers and tighten securely.

8. Position bump blocks out approximately 5/8" out from the edge of the inside flange of the bump block to the end of the base plate. Position the top of the tread cover plate on the bump blocks to be ¼" above dock level. Note that this placement will vary with ramp plate thickness. Mark centers of holes in bump block flanges.

9. Drill 5/8" dia. by 5" deep holes at center marks. Reposition bump blocks, insert anchor bolts with washers and tighten securely to dock face.

10. Place steel ramp plate in position, flush with top backside of base plate. Mark along full length of back edge of ramp plate. Slide ramp plate forward over dock leveler the width of bushing tool, approximately 2".

11. Place bushing tool on marked line at each end of ramp to ensure proper alignment at both ends, and tack weld ramp plate to dock leveler to hold ramp plate in place while bushing. A Skil Roto Hammer #736 or similar tool is recommended.

12. Using the back edge of the ramp plate as a guide, groove concrete approximately 5/8" deep by 2" wide, and should be the entire length of ramp plate.

13. Break tack welds holding ramp in place, slide ramp plate back into position with the top of the ramp plate flush with the top of the base plate. Tack weld each end and center of ramp plate to base plate.

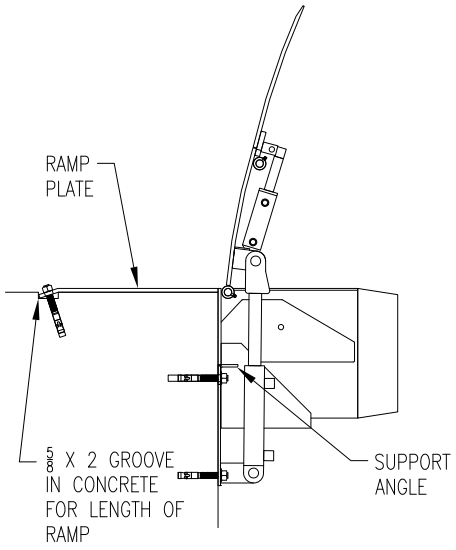
14. Drill 5/8" dia. by 5" deep holes through ramp plate at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to ramp plate using a ¼" fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through the nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.

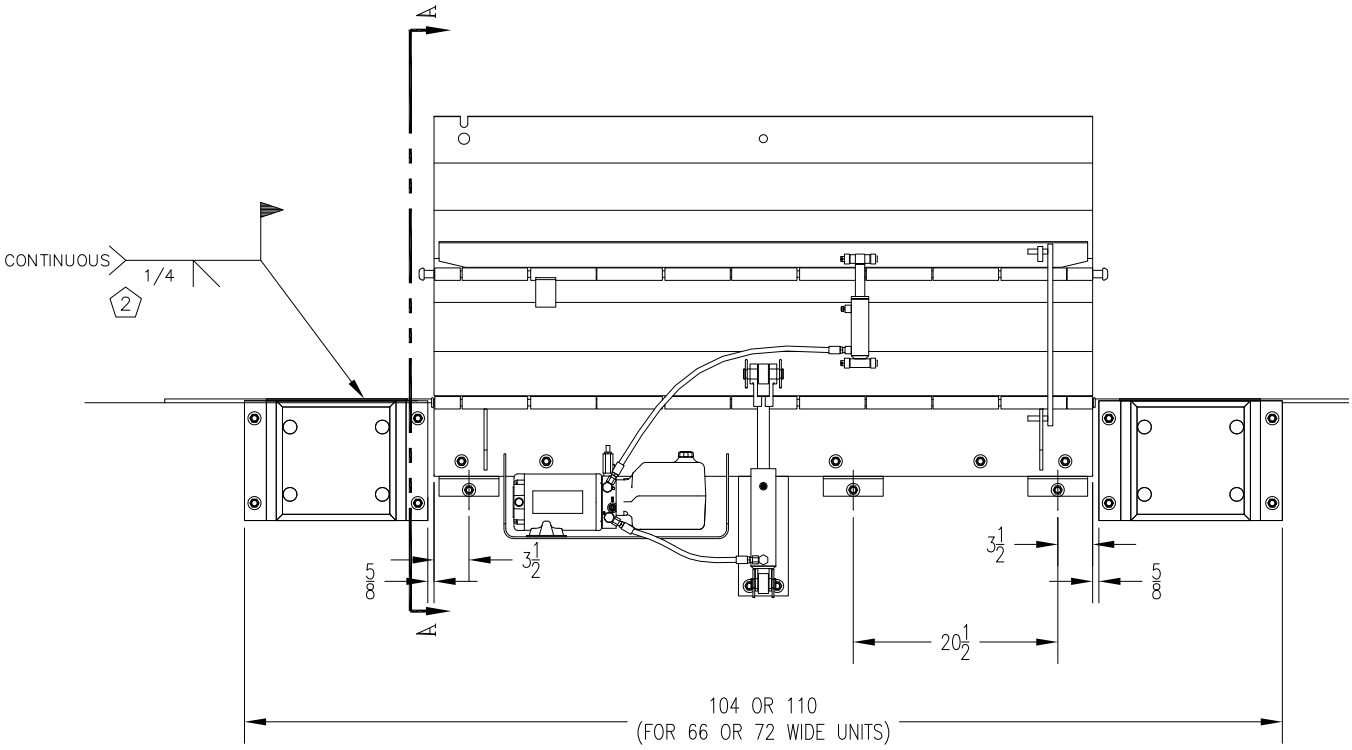
15. Complete welding of tacked parts as follows:
    A. Apply continuous weld across top of each bumper and base plate to ramp plate. Skip welding is acceptable to prevent warpage, but complete weld must be completed.
    B. Weld bottom of base plate to support angles using a ¼" fillet weld.

16. Installer must remove all welding slag, and repaint welded areas.

17. Drill 5/8" dia. by 5" deep holes in concrete through holes in lower cylinder mount, and install anchor bolts with washers and tighten securely.

18. Field mount control box to inside wall. Field wire control box and hydraulic power unit per electrical schematic(s) provided. Read and comply with all local electrical codes.
19. Before install is complete, installer must make a final operational check of dock leveler to verify all phases of install are correct. Installer must complete, sign, and return the Installation Check list upon completion.





WARNING

Securely block or support ramp and lip when in vertical positions. Lack of proper bracing can result in ramp dropping during adjustment or installation causing personal injury or damage to unit.

NOTE	DESCRIPTION
1	Top of base plate and bumper cover plate to be flush with top of ramp plate.
2	Apply continuous bevel weld across both bumpers and length of base plate.

H.E.D. Installation Instructions
Ramp Mount - Weld On w/Formed Angle

A ramp mount-weld on used with a formed angle application is used when dock edge is damaged, there is no dock steel securely anchored into the concrete, and the dock height is too low and the leveler must be installed above this height to correct this situation.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.

2. Review and follow formed angle installation instructions prior to leveler installation.

3. At chosen location for Edge of Dock leveler, locate the center of space and mark a point half of the base plate width to the left and right.

4. At the points marked to each side of center, measure and mark points 7-3/4" below dock level less height the unit is to be raised to locate bottom of base plate. This will locate the top of the base plate X" above dock level.

5. Using a proper lifting device, raise and position the leveler base plate to marked position. While holding base plate tight against dock face, tack weld securely to dock steel on left hand end of leveler. Check right hand end of base plate, ensure that end is against dock steel and that the bottom of the base plate is even with the marks made previously. Tack right hand end to dock steel. Support unit until final welding is ready to complete.

6. Position bump blocks out approximately 5/8" out from the edge of the inside flange of the bump block to the end of the base plate. Position the top of the tread cover plate on the bump blocks to be flush with the top of the base plate. Tack weld bump blocks to dock steel.

7. Place steel ramp plate in position, flush with top backside of base plate. Mark along full length of back edge of ramp plate. Slide ramp plate forward over dock leveler the width of bushing tool, approximately 2".

8. Place bushing tool on marked line at each end of ramp to ensure proper alignment at both ends, and tack weld ramp plate to dock leveler to hold ramp plate in place while bushing. A Skil Roto Hammer #736 or similar tool is recommended.

9. Using the back edge of the ramp plate as a guide, groove concrete approximately 3/4" deep by 2" wide, and should be the entire length of ramp plate.

10. Break tack welds holding ramp in place, slide ramp plate back into position with the top of the ramp plate flush with the top of the base plate. Tack weld each end and center of ramp plate to base plate.

11. Drill 5/8" dia. by 5" deep holes through ramp plate at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to ramp plate using a ¼" fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through the nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.

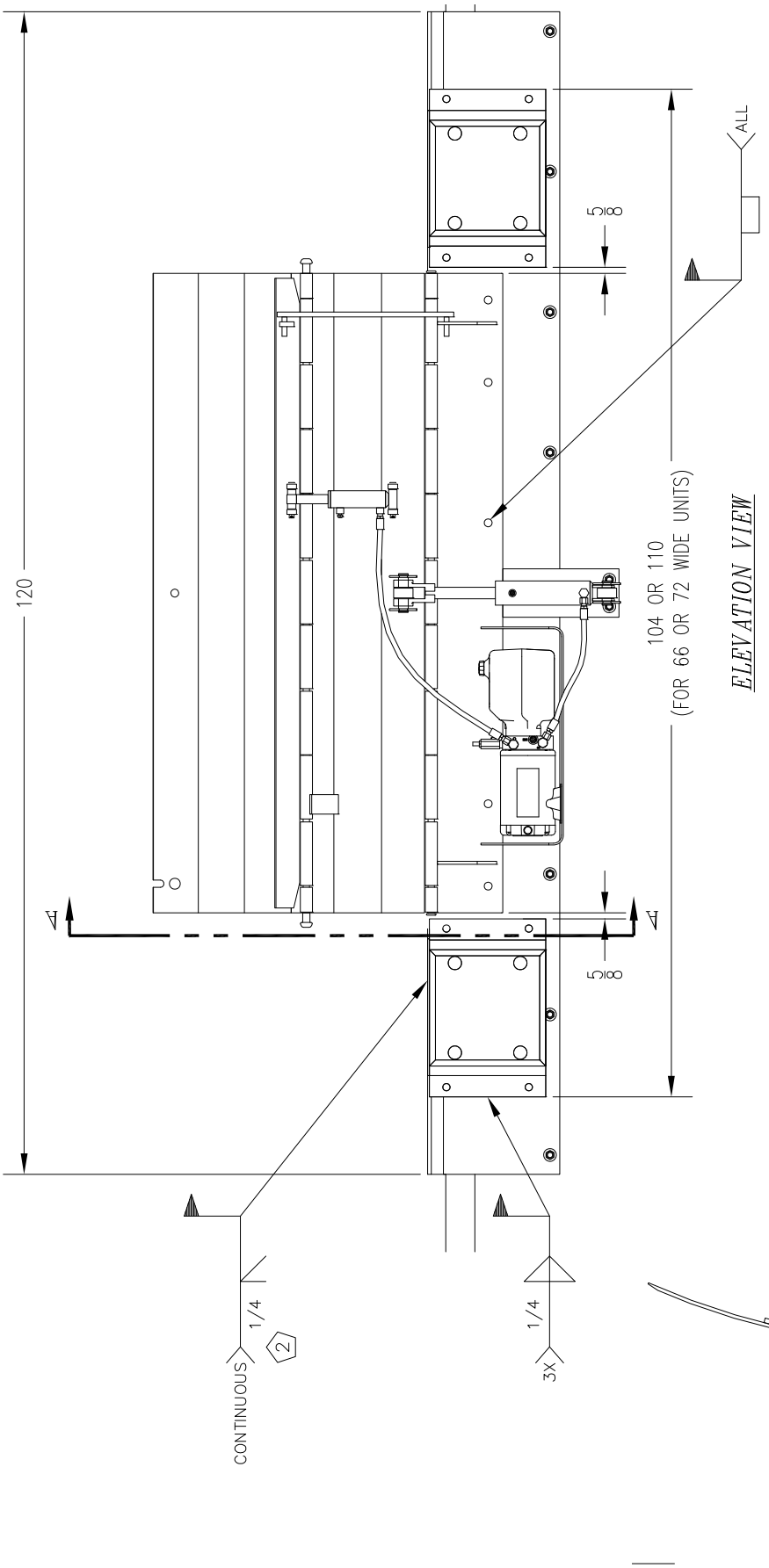
12. Complete welding of tacked parts as follows:
    A. Apply continuous weld across top of each bumper and base plate to ramp plate. Skip welding is acceptable to prevent warpage, but complete weld must be completed.
    B. Weld vertically along each end of base plate and on both inboard and outboard flanges of bump blocks.
    C. Fully plug weld all holes in base plate.

13. Installer must remove all welding slag, and repaint welded areas.

14. Drill 5/8" dia. by 5" deep holes in concrete through holes in lower cylinder mount, and install anchor bolts with washers and tighten securely.

15. Field mount control box to inside wall. Field wire control box and hydraulic power unit per electrical schematic(s) provided. Read and comply with all local electrical codes.

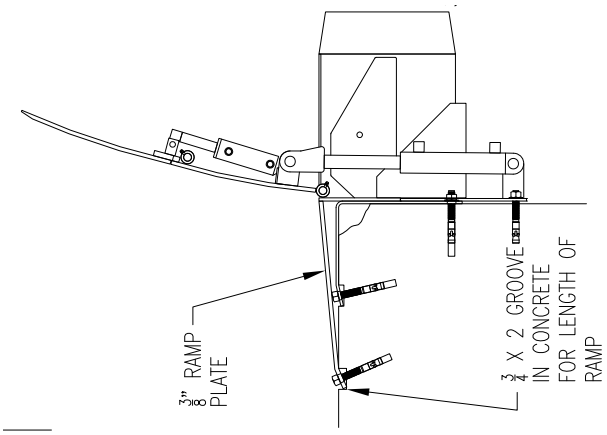
16. Before install is complete, installer must make a final operational check of dock leveler to verify all phases of install are correct. Installer must complete, sign, and return the Installation Checklist upon completion.



NOTE	DESCRIPTION
1	Top of base plate and bumper cover plate to be flush with top of ramp plate.
2	Apply continuous bevel weld across both bumpers and length of base plate.
3	To figure ramp plate length, need 12" ramp for every 1-1/2" of rise to ramp.
4	To install formed angle, see formed angle installation instructions.

WARNING

Securely block or support ramp and lip when in vertical positions. Lack of proper bracing can result in ramp dropping during adjustment or installation causing personal injury or damage to unit.



H.E.D. Installation Instructions
Formed Angle

A formed angle is used when there is no existing dock steel and concrete at the dock edge has been damaged. The formed angle is required to rebuild the damaged concrete edge for a proper installation if the dock height is adequate.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.

2. At chosen location for the formed angle, locate the center of space and mark a point half of the angle width to the left and right.

3. Using a proper lifting device, raise and position the formed angle to marked position, slide formed angle against dock face.

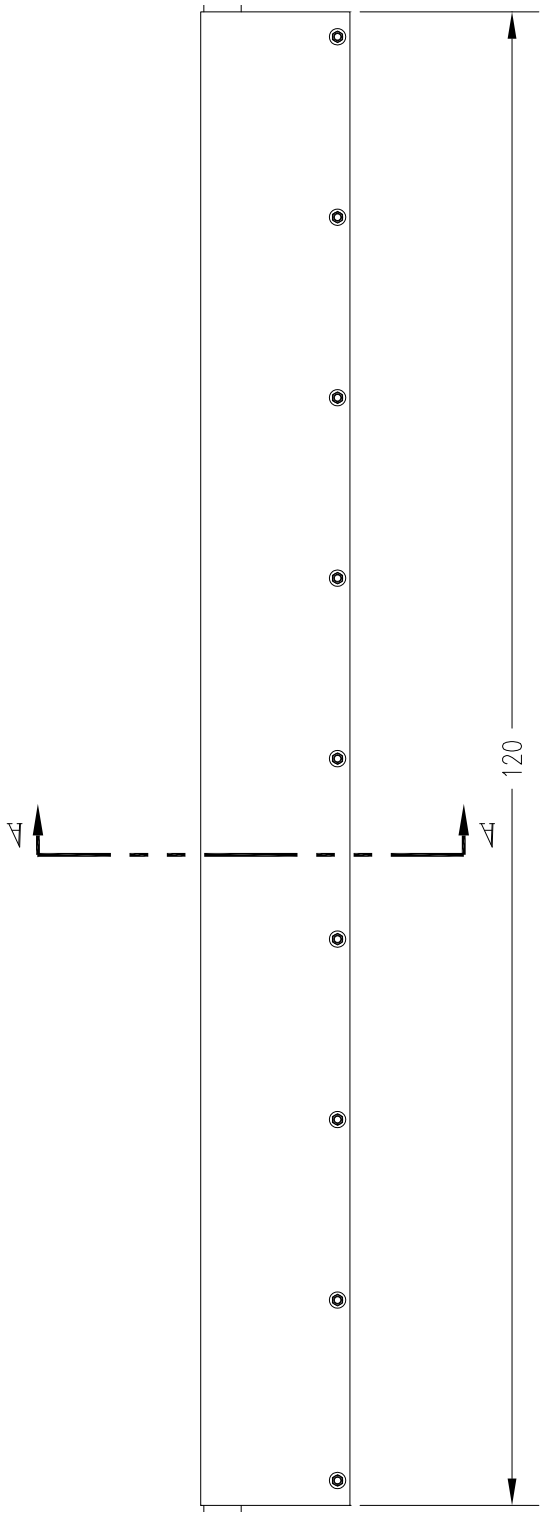
4. Mark along full length of back edge of formed angle. Slide angle forward the width of brushing tool, approximately 2”.

5. Place brushing tool on marked line at each end of formed angle to ensure proper alignment at both ends. A Skil Roto Hammer #736 or similar tool is recommended.

6. Using the back edge of the formed angle as a guide, groove concrete approximately 5/8” deep by 2” wide, and should be the entire length of the formed angle.

7. Slide formed angle back until tight against dock face. drill 5/8” dia. by 5” deep holes through formed angle at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to formed angle using a 1/4” fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through the nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.

8. Drill 5/8” dia. by 5” deep holes in dock face through holes in formed angle. Install anchor bolts with washers and tighten securely per manufacturers specifications.



NOTE	DESCRIPTION
1	Secure formed angle with (18) anchor bolts, (9) each side

E.O.D. Installation Instructions
Ramp and Face Plate

A ramp mount requiring a face plate application is used when there is no existing dock steel and the concrete at the dock edge has been damaged. The dock height can be low, high, or adequate for this application, however, the face plate and ramp plate are required to rebuild the damaged concrete edge.

Installation Steps:

1. Remove all existing bumper material and protruding objects from dock edge. Clean and sweep dock edge free of debris and flammable chemicals before installing unit.

2. At chosen location for the face plate, locate the center of space and mark a point half of the face plate width to the left and right.

3. Using a proper lifting device, raise and position the face plate to marked position, and push face plate against dock face.

4. Top of face plate should be flush with the top of dock floor. mark center of holes in face plate into dock face. Drill 5/8” dia. by 5” holes into dock face. Install anchor bolts with washers per manufacturers specifications and tighten securely.

5. Place ramp plate to match each end of the face plate. leading (forward) edge of ramp plate should be flush with dock face.

6. Mark along full length of back edge of ramp plate. Slide ramp forward the width of bushing tool, approximately 2”.

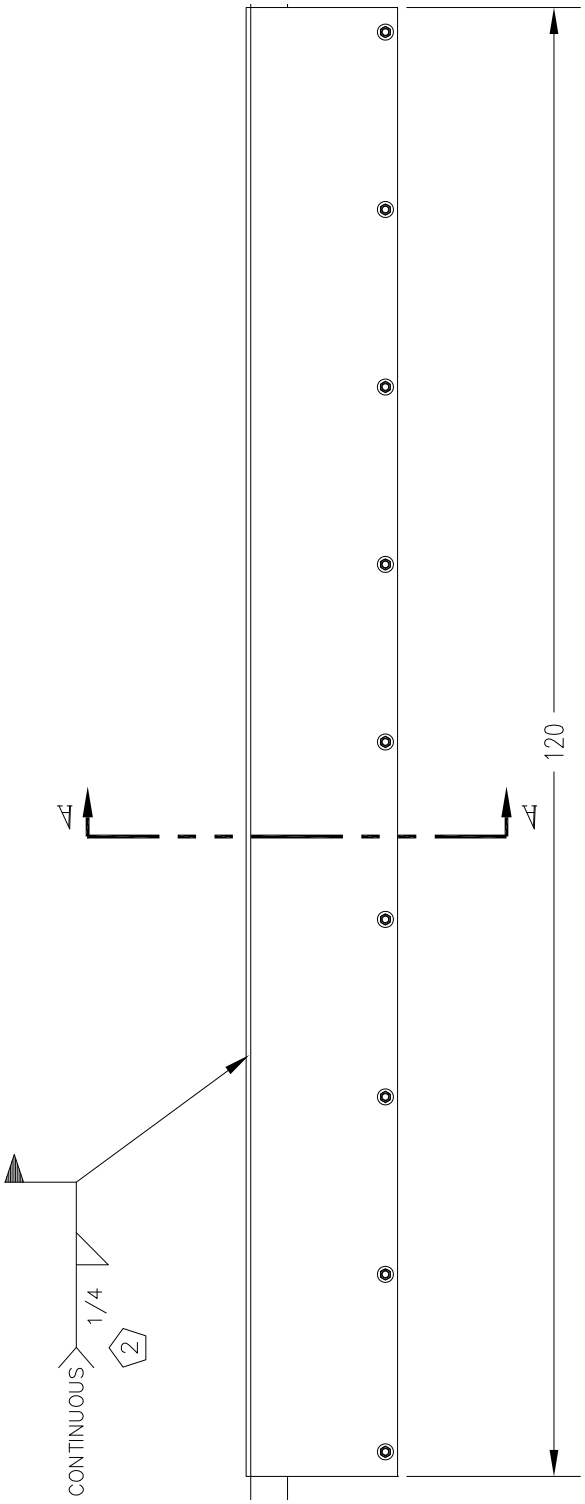
7. Place bushing tool on marked line at each end of ramp to ensure proper alignment at both ends. A Skil Roto Hammer #736 or similar tool is recommended.

8. Tack weld ramp to face plate on each end to secure in place.

9. Using the back edge of the ramp plate as a guide, groove concrete approximately 5/8” deep by 2” wide, and should be the entire length of the lamp plate.

10. Break tack welds and slide ramp back until forward edge is flush with dock face. Tack weld ramp on each end and center to face plate. Drill 5/8” dia. by 5” deep holes through ramp plate at back edge. Install anchor bolts per manufacturers specifications, and tighten securely. Weld anchor bolt nuts to ramp plate using a 1/4” fillet weld all the way around the nut. Cut off any portion of the anchor bolt exposed through he nut, and plug weld around the top of the nut to the anchor bolt. Ensure the top of the nuts are well rounded for smooth rollover.

11. Apply a continuous fillet weld at the created joint between the face plate and ramp. Skip welding should be the proper method used to avoid warpage, and a complete weld must be achieved.



NOTE	DESCRIPTION
1	Secure formed angle with (18) anchor bolts, (9) each side
2	Apply continuous fillet weld across entire length of face plate and ramp

INSTALLATION CHECK LIST

POWERAMP
McGUIRE
DLM
SYSTEMS, INC.
Loading Dock Equipment

E.O.D. Installation Checklist

Date: _____ Order No.: _____ Serial Number:_____

Installer: _____

Customer Name: _____

Address: _____

City/State: _____ Zip: _____

Phone: _____

1. Unit is properly aligned and installed properly. ☐
2. All welding has been fully completed. ☐
3. Welding slag has been removed. ☐
4. Welds and other affected areas have been painted. ☐
5. Springs have been properly adjusted. ☐
6. Unit is functioning properly without fault. ☐

I hereby certify that all installation and/or repair work has been inspected and approved by:

Company: _____ Date Completed: _____

Name: _____ Signature: _____

A copy of this document must be signed and faxed to Systems, Inc at 262-257-7399 to the attention Customer Service/ Technical Service. To be placed in job folder.
Copy as needed

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Install Control Panel and Wiring

WARNING

The electrical power must be OFF prior to electrical installation. For maximum protection, use an OSHA approved locking device to lock out all power sources. Only the person installing the equipment should have the key to unlock the power source.

Failure to follow these instructions may result in serious personal injury or death.

WARNING

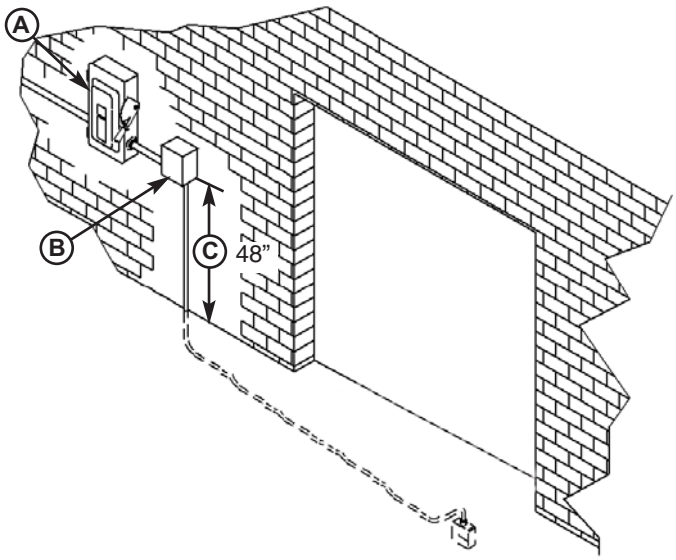
DO NOT make any final electrical connections until all welding has been completed. Failure to do this may result in serious personal injury or death.

CAUTION

All electrical work—including the installation of the disconnect panel, control panel, and final connections to the pit junction box—must be performed by a certified electrician and conform to all local and applicable national codes.

WARNING

Always stand clear of platform lip when working in front of the dock leveler. Serious personal injury or death may result.



A—Disconnect Panel (provided by others)
B—Control Panel C—Distance, 48 in. (14 630 mm)

1. Mount the pushbutton control panel (B) so bottom of control panel-to-dock floor distance (C) is 48 in. (1219.2 mm).
2. Install electrical disconnect panel (A) if not already installed.(by others)
3. Install and connect the control wiring.
4. Connect the dock leveler power cable to the field wires in the pit junction box. Refer to the electrical drawings supplied with the dock leveler.
5. After all electrical connections have been made, disengage the maintenance prop and lower the platform using the external lifting device connected to the platform lifting brackets.

Put New Dock Leveler Into Service

1. Disconnect the external lifting device

2. Install the dock bumpers as required

3. Turn the main electrical power ON.

4. Raise the leveler platform fully by pushing and holding the RAISE button .

NOTE: The platform of a properly operating dock leveler will automatically stop rising when it reaches its full raised height, at which point, the lip extends.

5. Release the RAISE button to lower the platform. As long as there is no truck present at the dock, the platform will lower to the full below-dock position as the lip folds.

NOTE: If a truck is present, the platform will lower until the lip rests on the truck/trailer bed. (See Operating Instructions in Operation section.)

6. Perform steps 4–5 at least four times to purge any air that may be in the hydraulic system and to ensure proper operation.

⚠ WARNING

Always stand clear of platform lip when working in front of the dock leveler. Serious personal injury or death may result.

⚠ CAUTION

Unless the dock leveler is equipped with a tethered remote, two people are required to engage the maintenance prop: one person to operate the unit, the other person to engage the maintenance prop.

OPERATION

Operating Instructions

DANGER

Stay clear of dock leveler when freight carrier is entering or leaving dock area.

DO NOT move or use the dock leveler if anyone is under or in front of leveler.

Keep hands and feet clear of pinch points. Avoid putting any part of your body near moving parts.

Failure to follow these instructions may result in severe personal injury or death.

WARNING

Only trained personnel should operate the dock leveler.

DO NOT use a broken or damaged dock leveler. Make sure proper service and maintenance procedures have been performed on leveler before using.

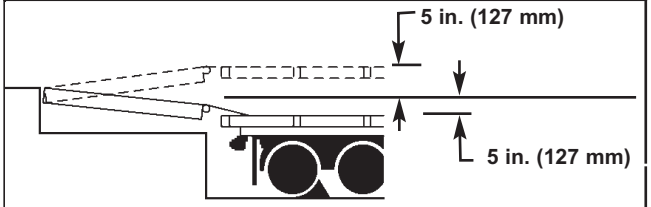
Truck/trailer wheels must be chocked unless the truck restraint is used. Never remove the wheel chocks until loading/unloading is finished and truck driver has been given permission to leave.

Make sure platform lip rests on the truck/trailer bed with at least 4 in. (102 mm) of overlap.

Maintain a safe distance from side edges of leveler during the loading/unloading process.

Failure to follow these instructions may result in serious personal injury or death.

WARNING



The HED hydraulic Edge-of Dock leveler is designed to compensate for a maximum ±5 in.* (127 mm) of height difference between the loading dock and the truck bed. DO NOT use the dock leveler if the truck/trailer bed is more than 5 in. (127 mm) higher or lower than the dock floor.

*service height may vary with design specifications

DO NOT overload the dock leveler.

DO NOT operate any equipment while under the influence of alcohol or drugs.

DO NOT leave equipment or material unattended on the dock leveler.

Failure to follow these instructions may result in personal injury and/or damage to equipment.

OPERATING INSTRUCTIONS

1. Make certain all equipment and personnel are clear of leveler before operation.

2. The truck should be firmly against the bump blocks and wheels chocked before operation of the leveler.

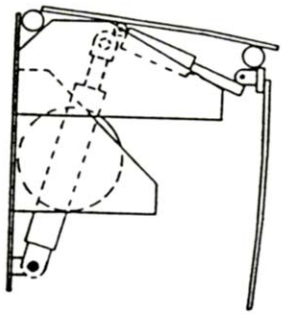


Figure 1

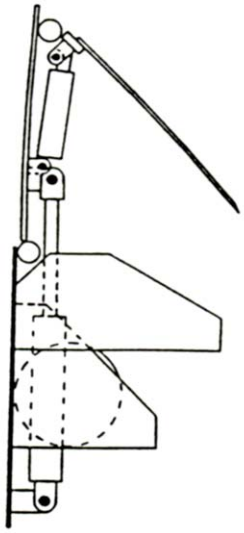


Figure 2

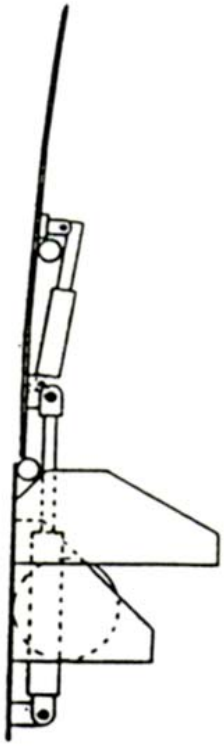


Figure 3

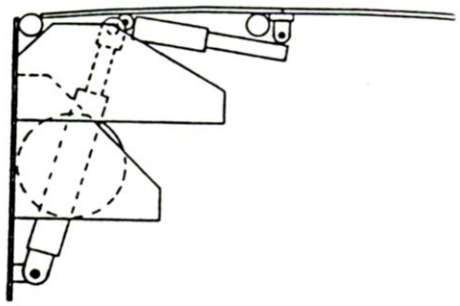


Figure 4

3. Always remove any end load while leveler is in stored position. (Figure 1).

4. Press and hold “RAISE” (A) button until leveler extends fully (Figure 3).

5. Release button. Leveler will lower to truck bed (Figure 4).

6. After truck departs, leveler will automatically return to stored position (Figure 1).

7. To remove leveler from truck before departure, operate leveler “RAISE” (A) button until lip clears truck bed, folds up and returns, (Figure 2) then release button. Leveler will then return to stored position (Figure 1).

A- Raise Button

Periodic Maintenance

Regular maintenance must be performed on a weekly and quarterly schedule.

Weekly Maintenance

- Operate the dock leveler through the complete operating cycle to maintain lubrication.

NOTE: To thoroughly inspect the platform hinge area, put the platform in the full below-dock position.

- Inspect the platform hinge and the lip hinge areas. The hinge areas must be kept free of dirt and debris. Build-up of foreign material in the hinge areas will cause abnormal operation.

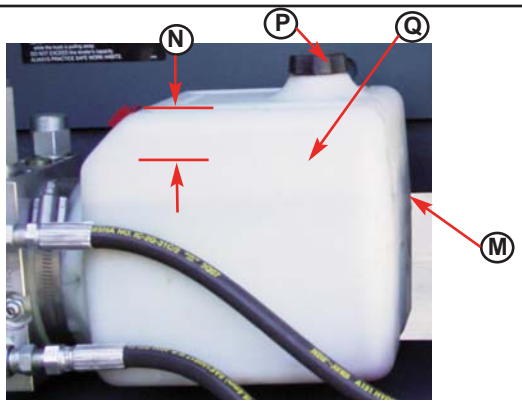
Quarterly Maintenance

IMPORTANT

Failure to properly lubricate the dock leveler will cause abnormal operation of the leveler.

- Platform hinge area (apply oil to top of all platform hinges when platform is at the full below-dock position)
- Lubricate the following areas with white lithium grease:
- Lip hinge area (apply oil to each of lip and platform lugs when platform is at the full below-dock position and lip is folded)
- Both Hoist and Lip cylinder trunnions

- ULTRA-VIS-HVI-15
- Flomite 530 ZF
- Aero Shell Fluid 4 or Fluid 41
- Mobile Aero HFA Mil-HS606A or Aero HF
- Texaco Aircraft Hydraulic Oil 15 or 5606
- Exxon Univis J13



M -- Reservoir

N- 3 in. (76.5mm) From Top of Reservoir

P - Breather Cap

Q - Fluid Level

IMPORTANT

A low fluid level or the use of hydraulic fluids not equivalent to the fluid types recommended, will cause abnormal operation of the leveler and WILL void warranty.

- Check reservoir fluid level (Q):

1. Put the dock leveler platform at the full above-dock position, engage prop.
2. Turn OFF all electrical power to the leveler.

⚠ WARNING

Before performing any maintenance under the dock leveler, lock the electrical power source in OFF position and lock the maintenance prop in the service position using an approved locking device. (See Service Dock Leveler Safely in this section.)

Failure to follow these instructions may result in serious personal injury or death.

3. Measure fluid level. The fluid level should be approximately 3 in. (76.5 mm) (N) from top of reservoir (M) with platform raised on the maintenance prop.
4. Add hydraulic fluid if necessary. Use only recommended fluid.
5. Turn ON electrical power to the leveler.
6. Return the platform to the cross-traffic position.

Adjust Main Pressure Relief

WARNING

When service under the dock leveler is required, always lock all electrical disconnects in the OFF position after raising the platform and engaging the maintenance prop. Failure to do this may result in serious personal injury or death.

WARNING

Always post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the dock leveler before maintenance is complete. Failure to do this may result in serious personal injury or death.

WARNING

Always stand clear of the dock leveler lip when working in front of the dock leveler.

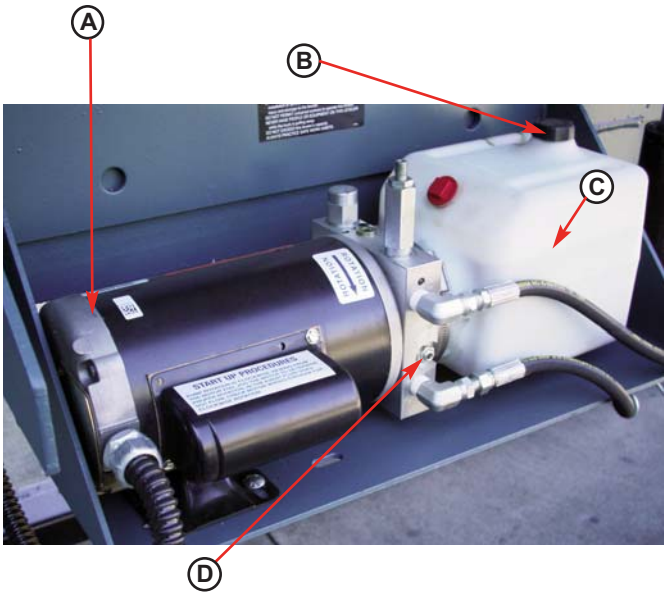
The maintenance prop MUST be in the service position when working under the dock leveler. For maximum protection, use an OSHA approved locking device to lock the maintenance prop in the service position. Only the person servicing the equipment should have the key to unlock the maintenance prop.

Unless the dock leveler is equipped with a tethered remote, two people are required to engage the maintenance prop: one person to operate the unit, the other person to engage the maintenance prop.

Failure to follow these instructions may result in serious personal injury or death.

NOTE: The main pressure relief may need to be increased if the platform does not rise or rises slowly and the system operates in pressure relief mode. See Troubleshooting section.

The main pressure relief may need to be decreased if the pump motor loads down when platform reaches the full raised position. See Troubleshooting section.

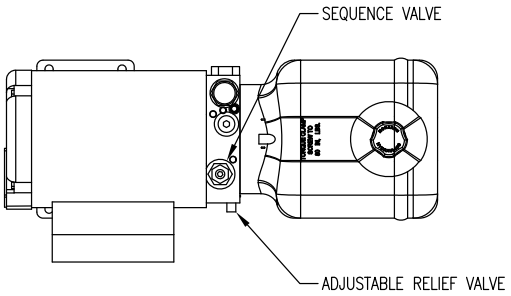


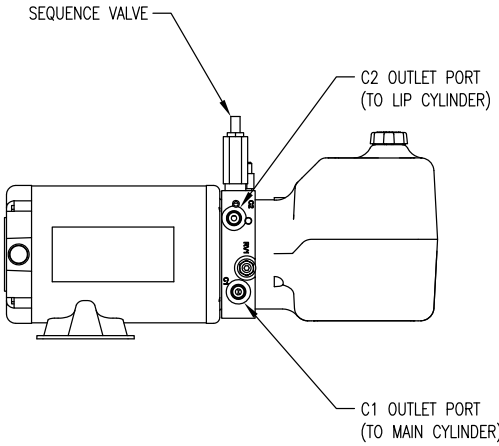
A—Motor
B—Breather/Fill Cap
C—Reservoir
D—Main Pressure Relief

To adjust the main pressure relief:

1. Raise the platform fully and engage the maintenance prop in the service position.
2. Turn OFF all electrical power to the dock leveler. Attach safety lockout and tagout devices.
3. Loosen locking nut.
4. Adjust hex adjusting screw in small 1/4 turn increments as follows:
   - Turn clockwise to increase pressure relief.
   - Turn counterclockwise to decrease pressure relief.
5. Tighten the jam nut.
6. Turn ON electrical power to the dock leveler.
7. Disengage the maintenance prop.
8. Check leveler operation.
9. Repeat steps 1–8 as necessary.

Adjust Lip Function





NOTES:
1. RELIEF VALVE IS FACTORY SET AT 1500 PSI. THIS VALVE IS MAIN SYSTEM RELIEF.
2. RELIEF VALVE ADJUSTMENT:
A. LOOSEN JAM NUT.
B. TURN SCREW CLOCKWISE TO INCREASE PRESSURE.
C. TURN SCREW COUNTER CLOCKWISE TO DECREASE PRESSURE.
D. TIGHTEN JAM NUT.
3. SEQUENCE VALVE IS FACTORY SET AT 750 PSI. TURN CLOCKWISE TO INCREASE PRESSURE, TURN COUNTER CLOCKWISE TO DECREASE PRESSURE. THIS VALVE NORMALLY SHOULD NOT NEED ADJUSTMENT.
4. SEE TROUBLESHOOTING SECTION FOR FURTHER ADJUSTMENT PROCEDURES.

TROUBLESHOOTING:
1. IF LIP OPENS AS PLATFORM BEGINS TO RISE, TURN SEQUENCE VALVE CLOCKWISE IN $\frac{1}{4}$ TURN INCREMENTS.
2. IF LIP WILL NOT FULLY RETRACT WHEN RECYCLING PLATFORM TO STORED POSITION, TURN SEQUENCE VALVE CLOCKWISE IN $\frac{1}{8}$ TURN INCREMENTS.

NOTE: ALL ADJUSTMENTS SHOULD BE MADE IN SMALL INCREMENTS, AND SHOULD BE CHARTED TO HAVE RELIABLE INFORMATION WHEN BACK TRACKING THROUGH ADJUSTMENTS.

WARNING

When service under the dock leveler is required, always lock all electrical disconnects in the OFF position after raising the platform and engaging the maintenance prop. Failure to do this may result in serious personal injury or death.

WARNING

Always post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the dock leveler before maintenance is complete. Failure to do this may result in serious personal injury or death.

WARNING

Always stand clear of the dock leveler lip when working in front of the dock leveler.

The maintenance prop MUST be in the service position when working under the dock leveler. For maximum protection, use an OSHA approved locking device to lock the maintenance prop in the service position. Only the person servicing the equipment should have the key to unlock the maintenance prop.

Unless the dock leveler is equipped with a tethered remote, two people are required to engage the maintenance prop: one person to operate the unit, the other person to engage the maintenance prop.

Failure to follow these instructions may result in serious personal injury or death.

1 Phase

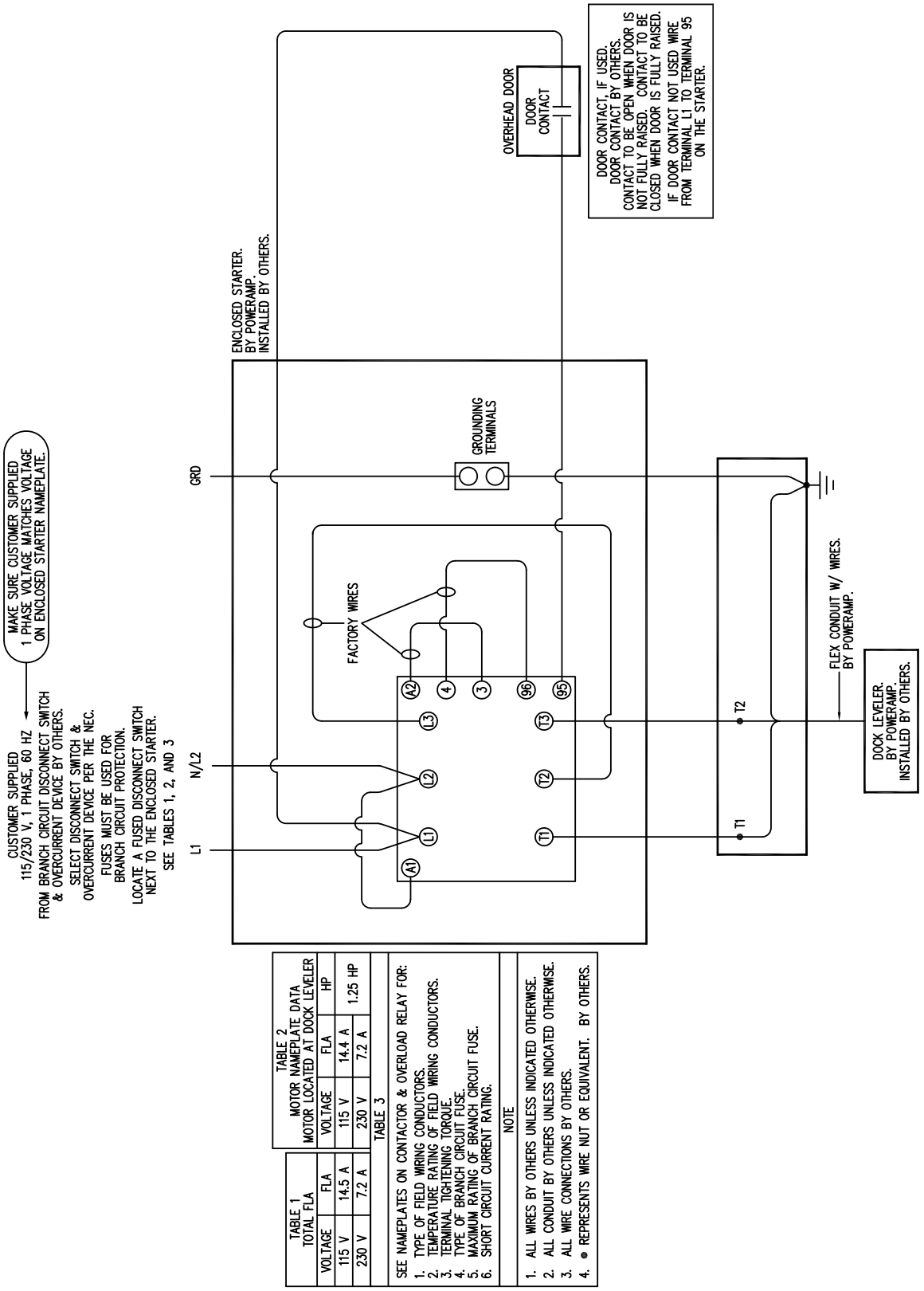

MAKE SURE CUSTOMER SUPPLIED 1 PHASE VOLTAGE MATCHES VOLTAGE ON ENCLOSED STARTER NAMEPLATE.
CUSTOMER SUPPLIED 115/230 V, 1 PHASE, 60 HZ FROM BRANCH CIRCUIT DISCONNECT SWITCH & OVERCURRENT DEVICE BY OTHERS.
SELECT DISCONNECT SWITCH & OVERCURRENT DEVICE PER THE NEC.
FUSES MUST BE USED FOR BRANCH CIRCUIT PROTECTION.
LOCATE A FUSED DISCONNECT SWITCH NEXT TO THE ENCLOSED STARTER.
SEE TABLES 1, 2, AND 3
L1
N/L2
GRD
ENCLOSED STARTER. BY POWERAMP. INSTALLED BY OTHERS.
GROUNDING TERMINALS
FACTORY WIRES
OVERHEAD DOOR
DOOR CONTACT
DOOR CONTACT IF USED. DOOR CONTACT BY OTHERS. CONTACT TO BE OPEN WHEN DOOR IS NOT FULLY RAISED. CONTACT TO BE CLOSED WHEN DOOR IS FULLY RAISED. IF DOOR CONTACT NOT USED WIRE FROM TERMINAL L1 TO TERMINAL 95 ON THE STARTER.
FLEX CONDUIT W/ WIRES. BY POWERAMP.
DOCK LEVELER. BY POWERAMP. INSTALLED BY OTHERS.
T1
T2
A1
A2
L1
L2
L3
T1
T2
T3
3
4
95
96

TABLE 1 TOTAL FLA	
VOLTAGE	FLA
115 V	14.5 A
230 V	7.2 A

TABLE 2 MOTOR NAMEPLATE DATA MOTOR LOCATED AT DOCK LEVELER			
VOLTAGE	FLA	HP	
115 V	14.4 A	1.25 HP	
230 V	7.2 A		

TABLE 3

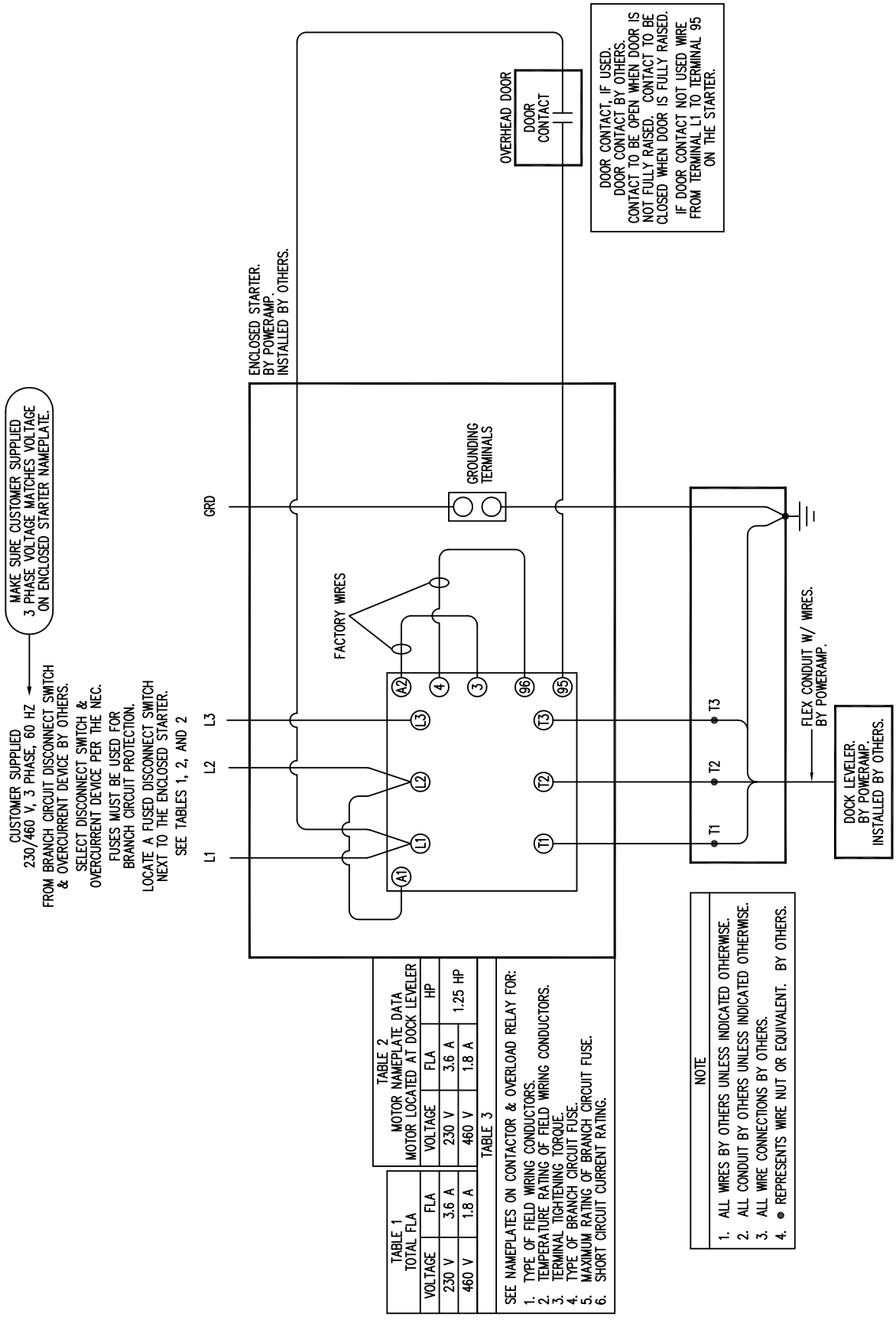
SEE NAMEPLATES ON CONTACTOR & OVERLOAD RELAY FOR:

1. TYPE OF FIELD WIRING CONDUCTORS.
2. TEMPERATURE RATING OF FIELD WIRING CONDUCTORS.
3. TERMINAL TIGHTENING TORQUE.
4. TYPE OF BRANCH CIRCUIT FUSE.
5. MAXIMUM RATING OF BRANCH CIRCUIT FUSE.
6. SHORT CIRCUIT CURRENT RATING.

NOTE

1. ALL WIRES BY OTHERS UNLESS INDICATED OTHERWISE.
2. ALL CONDUIT BY OTHERS UNLESS INDICATED OTHERWISE.
3. ALL WIRE CONNECTIONS BY OTHERS.
4. ● REPRESENTS WIRE NUT OR EQUIVALENT. BY OTHERS.

3 Phase


MAKE SURE CUSTOMER SUPPLIED 3 PHASE VOLTAGE MATCHES VOLTAGE ON ENCLOSED STARTER NAMEPLATE.
CUSTOMER SUPPLIED 230/460 V, 3 PHASE, 60 HZ FROM BRANCH CIRCUIT DISCONNECT SWITCH & OVERCURRENT DEVICE BY OTHERS.
SELECT DISCONNECT SWITCH & OVERCURRENT DEVICE PER THE NEC.
FUSES MUST BE USED FOR BRANCH CIRCUIT PROTECTION.
LOCATE A FUSED DISCONNECT SWITCH NEXT TO THE ENCLOSED STARTER.
SEE TABLES 1, 2, AND 2
L1
L2
L3
GRD
ENCLOSED STARTER. BY POWERAMP. INSTALLED BY OTHERS.
GROUNDING TERMINALS
FACTORY WIRES
A1
L1
L2
L3
A2
4
3
96
95
T1
T2
T3
OVERHEAD DOOR
DOOR CONTACT
DOOR CONTACT, IF USED. DOOR CONTACT BY OTHERS. CONTACT TO BE OPEN WHEN DOOR IS NOT FULLY RAISED. CONTACT TO BE CLOSED WHEN DOOR IS FULLY RAISED.
IF DOOR CONTACT NOT USED WIRE FROM TERMINAL L1 TO TERMINAL 95 ON THE STARTER.
FLEX CONDUIT W/ WIRES. BY POWERAMP.
DOCK LEVELER. BY POWERAMP. INSTALLED BY OTHERS.
TABLE 1
TOTAL FLA
VOLTAGE | FLA
230 V | 3.6 A
460 V | 1.8 A
TABLE 2
MOTOR NAMEPLATE DATA
MOTOR LOCATED AT DOCK LEVELER
VOLTAGE | FLA | HP
230 V | 3.6 A | 1.25 HP
460 V | 1.8 A
TABLE 3
SEE NAMEPLATES ON CONTACTOR & OVERLOAD RELAY FOR:
1. TYPE OF FIELD WIRING CONDUCTORS.
2. TEMPERATURE RATING OF FIELD WIRING CONDUCTORS.
3. TERMINAL TIGHTENING TORQUE.
4. TYPE OF BRANCH CIRCUIT FUSE.
5. MAXIMUM RATING OF BRANCH CIRCUIT FUSE.
6. SHORT CIRCUIT CURRENT RATING.
NOTE
1. ALL WIRES BY OTHERS UNLESS INDICATED OTHERWISE.
2. ALL CONDUIT BY OTHERS UNLESS INDICATED OTHERWISE.
3. ALL WIRE CONNECTIONS BY OTHERS.
4. ● REPRESENTS WIRE NUT OR EQUIVALENT. BY OTHERS.

TROUBLESHOOTING

Symptom	Solution
Unit raises but the lip plate will not retract.	Turn sequence valve clockwise approximately 1/4 turn and retest unit. If the lip plate still will not retract, repeat the above adjustment until unit operates properly. Unit raises but the lip plate will not extend.
The unit raises slowly, the motor is extremely noisy, and the hydraulic hoses are vibrating.	Check the fluid level in power unit reservoir, if low, add fluid and operate leveler several times to remove any air from the system.
Lip Plate will not stay extended.	Turn sequence valve clockwise in 1/2 turn increments until lip plate remains extended, but is still yieldable to approximately thirty pounds of downward force.
The lip plate extends before the unit reaches full dock height.	Turn sequence valve clockwise in 1/2 turn increments until lip plate operates properly.
The motor runs but the unit will not raise.	Check the motor for reverse polarity wiring. consult the wiring diagram located on the motor and reverse polarity according to the diagram.
Unit raises very slow.	Check for voltage drop due to wrong size wiring. Check fluid level.
Unit raises but control box shuts off during operation cycle.	Check the overload relay located in the control box and adjust if necessary.
Unit will not raise to full dock height.	Check fluid level in reservoir. Fluid level should be three inches below the top of the reservoir with all cylinders fully extended.

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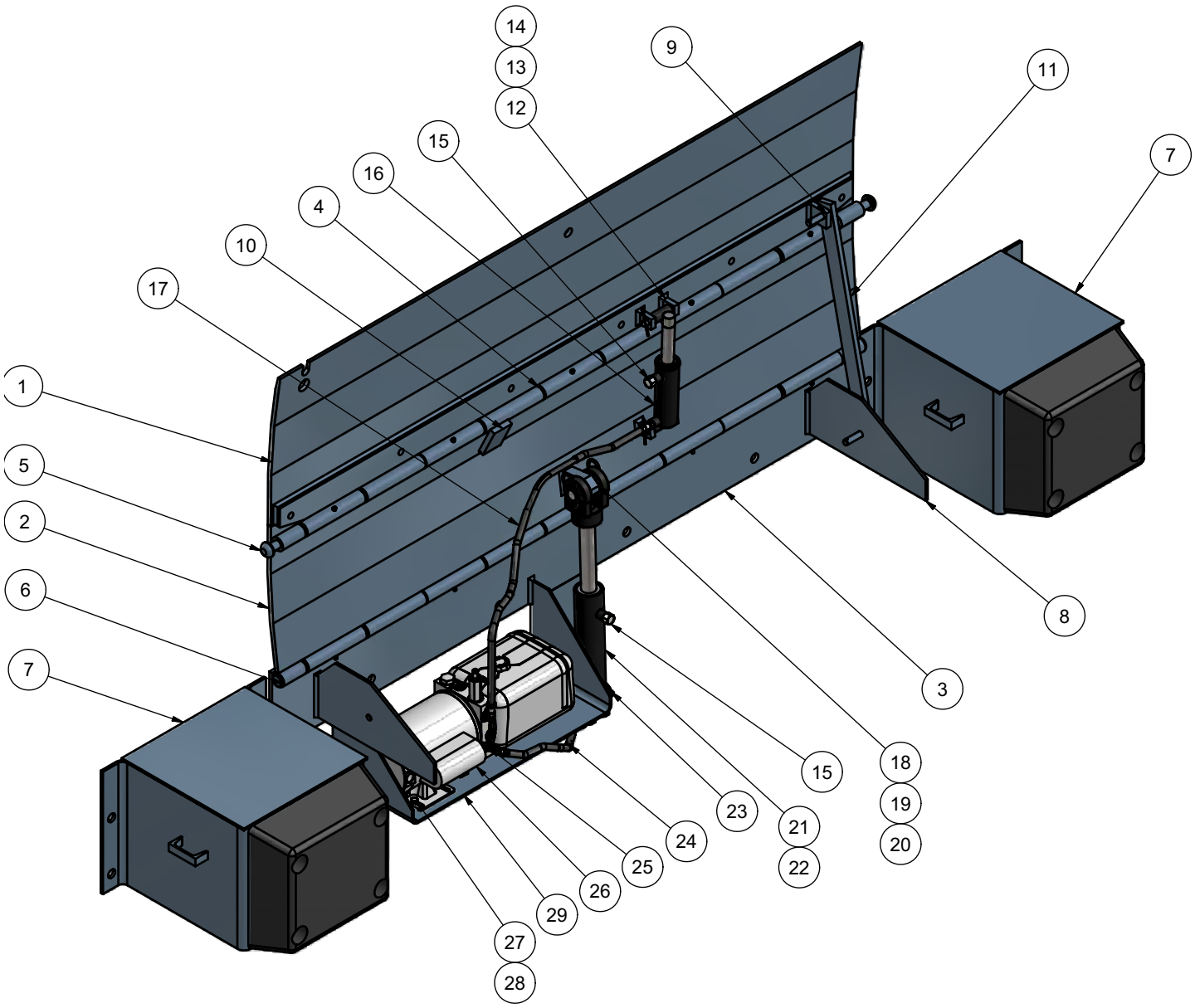
PARTS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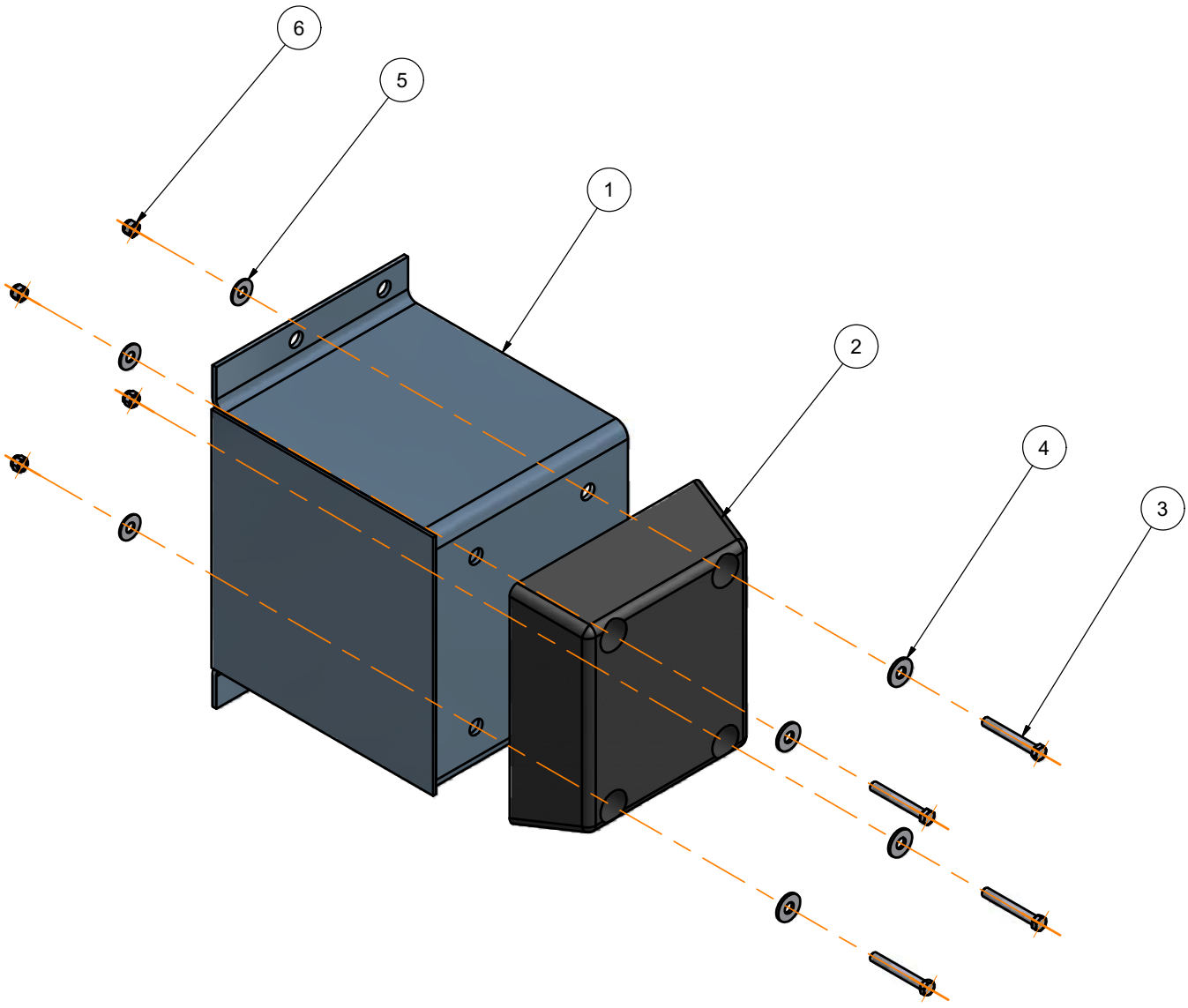
HEOD Model Edge of Dock

ITEM	QTY	Size/Capacity	Description	Part Number (15" Lip)	Part Number (17" Lip)
1	1	6620/25	Lip Plate & Hinge Assembly	DOTH-4100	DOTH-4111
1	1	6630	Lip Plate & Hinge Assembly	DOTH-4104	DOTH-4195
1	1	6635	Lip Plate & Hinge Assembly	DOTH-4129	DOTH-4133
1	1	7220/25	Lip Plate & Hinge Assembly	DOTH-4106	DOTH-4166
1	1	7230	Lip Plate & Hinge Assembly	DOTH-4114	DOTH-4172
1	1	7235	Lip Plate & Hinge Assembly	DOTH-3977	DOTH-3978
1	1	7820/25	Lip Plate & Hinge Assembly	DOTH-4107	DOTH-4007
1	1	7830	Lip Plate & Hinge Assembly	DOTH-4122	DOTH-3979
1	1	8420/25	Lip Plate & Hinge Assembly	DOTH-3161	DOTH-3980
1	1	8430	Lip Plate & Hinge Assembly	DOTH-3157	DOTH-3981
2	1	6620/25	Center Plate & Hinge Assembly	DOTH-4200	
2	1	6630	Center Plate & Hinge Assembly	DOTH-4208	
2	1	6635	Center Plate & Hinge Assembly	DOTH-3231	
2	1	7220/25	Center Plate & Hinge Assembly	DOTH-4212	
2	1	7230	Center Plate & Hinge Assembly	DOTH-4220	
2	1	7235	Center Plate & Hinge Assembly	DOTH-4218	
2	1	7820/25	Center Plate & Hinge Assembly	DOTH-4222	
2	1	7830	Center Plate & Hinge Assembly	DOTH-4223	
2	1	8420/25	Center Plate & Hinge Assembly	DOTH-3280	
2	1	8430	Center Plate & Hinge Assembly	DOTH-3273	
3	1	All	Base Plate & Hinge Assembly	Consult Factory	
4	2	6620/25/30	Hinge Pin	DOTH-3104	
4	2	6635	Hinge Pin	DOTH-4312	
4	2	7220/25/30	Hinge Pin	DOTH-3122	
4	2	7235	Hinge Pin	DOTH-4313	
4	2	7820/25/30	Hinge Pin	DOTH-3946	
4	2	8420/25/30	Hinge Pin	DOTH-3920	
5	2	All	Rivet - Button	DOTH-2400	
6	2	All	Rivet - Flat	DOTH-2398	
7	2	All	18" Projection Bumper Block	DOTH-3550	
8	2	All	HED Gusset	DOTH-4309	
9	1	All	Pivot Block	DOTH-3316	
10	1	All	Lip Stop	DOTH-3734	
11	1	All	Safety Strut Assembly	DOTH-4325	
12	4	All	Pivot Block	DOTH-3113	
13	2	All	Clevis Pin	DOTH-2364	
14	2	All	Cotter Pin	DOTH-2374	
15	2	All	Breather Vent Plug	DOTH-2717	
16	1	All	Lip Cylinder	DOTH-2721	
17	1	All	Hose Assembly - 39"	DOTH-2799	
18	1	All	Upper Cylinder Pivot	DOTH-4202	
19	2	All	Main Cylinder Pin	DOTH-2358	
20	2	All	Hitch Clip	DOTH-2815	
21	1	All	Main Cylinder	DOTH-2725	
22	1	All	Lower Cylinder Mount Assembly	DOTH-4302	
23	1	All	90 Degree Fitting	DOTH-2738	
24	1	All	Hose Assembly - 17"	DOTH-2787	
25	2	All	90 Degree Fitting	DOTH-2739	
26	1	All	Hydraulic Power Unit 115V/1PH	DOTH-2854	
26	1	All	Hydraulic Power Unit 230V/1PH	DOTH-2846	
26	1	All	Hydraulic Power Unit 230V/3PH	DOTH-2855	
26	1	All	Hydraulic Power Unit 460V/3PH	DOTH-2847	
27	4	All	Carraige Bolt	2101-0029	
28	4	All	Flange Nut	2101-0214	
29	1	All	Motor Mount Bracket	DOTH-4305	

BILL OF MATERIAL				
ITEM	QTY	PART NO.	DESCRIPTION	SIZE
1	1	DOTH-3556	18" PROJ. X 12" BB WELDMENT (HED)	
2	1	DOTH-3505	RUBBER - TUF-CORD	4 X 12 X 13
3	4	DOTH-2056	HEX HEAD CAP SCREW	7/16-14 UNC X 3-1/4
4	4	DOTH-2210	WASHER - FLAT - ZINC PLATED	1/2" DIA
5	4	DOTH-2208	WASHER - FLAT	1/2" DIA
6	4	DOTH-2129	NYLON LOCK NUT	7/16-14 UNC



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Customer Information

NOTE: The model/serial number decal (A) is located on the right platform joist near the front (lip) of dock leveler.

When you receive your HED-series Edge-Of-Dock leveler, write down the dock leveler model and serial number in the form provided. This will help ensure safe keeping of the numbers in the event the model/serial number decal (A) becomes lost or damaged.

Also, write down McGuire job number, the company that installed the dock leveler, and the original owner's name. This will all help to identify the specific dock leveler if more information is required.

When ordering, use part numbers and description to help identify the item ordered. Do not use "item" numbers. These are only for locating the position of the parts. Always give dock leveler MODEL NUMBER and/or SERIAL NUMBER.

For service, call or contact:

McGuire.
P.O. Box 309
Germantown, WI 53022

Phone: (800) 624-8473
Fax: (262) 255-5917

Dock Leveler Information

Model _____

Serial No. _____

McGuire Job No. _____

Original Owner Information

Name _____

Address _____

_____

Installer Information

Name _____

Address _____

_____

Date of Installation _____

McGuire., guarantees the materials, components, and workmanship in your McGuire. dock leveler to be of the highest quality and to be free of defects in material and workmanship for a period of one (1) year from date of shipment, specifically the deck section, lip section, frame, rear hinge, front hinge.

McGuire., further guarantees the hydraulic components on all McGuire dock levelers for a period of one (1) year from date of shipment.

Specifically this guarantee applies to:

- All hydraulic cylinders
- Hydraulic pressure lines
- Hydraulic pump and motor.

The electrical components carry a one (1) year warranty.

In the event of any defect covered by this guarantee,McGuire, will remedy said defect by repairing or replacing all defective parts, bearing all of the costs for parts, labor, and transportation.

All guarantee claims will be settled on a timely basis when defects are found to be from other than improper installation, operating contrary to instructions or beyond rated load capacities, abuse, careless or negligent use, or failure to maintain the unit as recommended by the owner's/ user’s manual.

There are no guarantees, either expressed or implied, including any implied guarantees of merchantability or fitness for a particular purpose which shall extend beyond the guarantee periods indicated above. This guarantee is valid only if the unit(s) is unaltered from original condition as delivered from the factory and a survey is completed by a McGuire. representative.